



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/620,526	07/20/2000	Bruce E. Novich	1596C3	2610

7590 05/06/2005

PPG Industries Inc  
One PPG Place  
Pittsburgh, PA 15272

EXAMINER

GRAY, JILL M

ART UNIT PAPER NUMBER

1774

DATE MAILED: 05/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/620,526

Applicant(s)

NOVICH ET AL.

Examiner

Jill M. Gray

Art Unit

1774

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3 and 5-56 is/are pending in the application.
- 4a) Of the above claim(s) 9-12 and 15-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 11-14 and 18-56 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 1774

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election with traverse of Group III, lamellar particles, claims 13 and 14 in the reply filed on December 2, 2004 is acknowledged. The traversal is on the ground(s) that examination of the entire application can be made without serious burden to the examiner. This is not found persuasive because each type of particulate material is a patentable distinct species having properties and characteristics that are separate and distinct from the other, which may result in search areas not common to the fiber strand. This would result in a burden to the examiner.

The requirement is still deemed proper and is therefore made FINAL.

### ***Response to Amendment***

The objection to the specification has been withdrawn in view of applicants' amendment.

The rejection of claims 1-11, 13, and 18-32 under 35 U.S.C. 103(a) as being unpatentable over Sakaguchi et al, 4,006,272 in view of Raghupathi et al, 6,139,958 is withdrawn upon further consideration.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 1774

Claims 44, 46, and 51-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakaguchi et al, 4,006,272 (Sakaguchi) in view of Raghupathi et al, 6,139,958 (Raghupathi), for reasons of record.

Sakaguchi and Raghupathi are as set forth previously. As to claims 44, Sakaguchi teaches that lamellar particles such as silica can be added. The examiner has reason to believe that the thermal conductivity is within the range contemplated by applicants.

Claims 1-3, 5-8, 13-14, 18-32, and 44-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kotera et al, 4,340,519 (Kotera) in view of Raghupathi et al, 6,139,958 (Raghupathi), for reasons of record.

Claims 1-3, 5, 18-32, and 51-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hager et al, 5,689,601 (Hager) in view of "Concise Chemical and Technical Dictionary", 4<sup>th</sup> ed., (hereinafter the dictionary), cited to show the state of the art.

Hager teaches an at least partially coated glass fiber strand having a coating composition on at least a portion of a surface of at least one of the fibers, the coating comprising a film forming material, a lubricious material, and discrete particles of an acrylic latex material. The film forming material is a polyolefin polymeric material; the lubricious material can be wax, and the composition can be aqueous based, as set forth in claims 2-3, 22, 25-26, 28, 53-56. In addition, Hager teaches that the lubricious material can be present in amounts of 5% by weight of the coating on a total solids basis, and the particle size is within applicants' range as set forth in claims 19, 23-24

Art Unit: 1774

and is present in an amount as contemplated by applicants in claims 20-21. See column 3, lines 21-33 and column 4, lines 43-44.

Therefore, the teachings of Hager would have rendered obvious the invention as claimed in present claims 1-3, 5, 18-32, and 51-56.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-56 have been considered but are moot in view of the new ground(s) of rejection.

Applicants argue that Sakaguchi does not teach or suggest "a plurality of discrete" particles as defined in the specification and as recited in independent claim 51 of the present invention and that Raghupathi does not remedy this problem.

In this regard, Sakaguchi teaches that finely divided silica can be added. It is the examiner's position that silica is a particle that does not tend to coalesce or combine to form continuous films under conventional processing conditions, but instead, substantially retain its individual distinctness and generally retains its individual shape or form. Furthermore, it is the examiner's position that the language of "conventional processing conditions" as set forth in applicants' definition is not sufficiently clear. This language could refer to a) mixing or b) drying or c) heating or d) weaving or a combination, all of which individually constitute "conventional processing conditions". Moreover, this language may refer to such processing conditions as time and temperature of drying, heating or immersion. Thus, the examiner submits that the finely divided silica as well as the dry powder binder of Sakaguchi, are in fact "discrete particles", as defined by applicants. In addition, Raghupathi is relied upon for all that he

Art Unit: 1774

would have imparted to one of ordinary skill in the art at the time the invention was made, namely, that glass fibers of the type contemplated by applicants could be used.

Applicants argue that there is no reason to combine prior art references Kotera and Raghupathi.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Raghupathi would have provided motivation to the skilled artisan to use glass fiber mat as the glass substrate of Kotera with the reasonable expectation of obtaining glass fiber mat with great transparency.

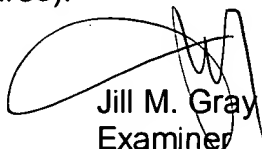
No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill M. Gray whose telephone number is 571-272-1524. The examiner can normally be reached on M-F 10:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1774

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jill M. Gray  
Examiner  
Art Unit 1774

jmg